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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,731	03/15/2002	John Chapin	VANU-P01-004	4220

28120 7590 06/09/2004

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EXAMINER

DOAN, PHUOC HUU

ART UNIT	PAPER NUMBER
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2684

13

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/099,731

Applicant(s)

CHAPIN, JOHN

Examiner

Phuoc H Doan

Art Unit

2864

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 13 is/are rejected.
- 7) ☒ Claim(s) 7-9, 11- 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palermo (US 6,181,734) in view of Fette et al (US 6,052,600).

As to claim 1, Palermo teaches a software-defined wireless communications device comprising: a hardware platform 807,813,841 (Fig. 8); platform software 803-806 (Fig. 8) that controls an operating characteristic of the hardware platform. Palermo fails to teach that waveform software separate from the platform software, the waveform software including authorization tags providing authorization for the waveform software to execute on the hardware platform. Fette et al teach that waveform software 200 (Fig. 2) separate from the platform software, the waveform software including authorization tags (col. 2, lines 34-60) providing authorization for the waveform software to execute on the hardware platform. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an authorization for the waveform software of Fette et al to execute on the hardware platform and platform software of Palermo in order to compatible with communication equipment as suggested by Fette et al, (col. 1, lines 10-24).

As to claim 2, Palermo fails to teach that the authorization tags to ensure that a RF emission from the communication device is below a specified limit when the

waveform software is executed on the hardware platform. Fette et al teach the authorization tags to ensure that a RF emission from the communication device is below a specified limit when the waveform software is executed on the hardware platform. See (col. 2, lines 40-67), and (col. 3, lines 1-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the authorization tags to ensure that a RF emission from communication device of Fette et al to the hardware platform and platform software of Palermo in order to verify the specification is need to ensure a radio operates according to regulatory restriction. See (col. 1, lines 48-61).

As to claim 3, Palermo fails to teach that the waveform software can be ported to another hardware platform once the waveform software has been authorized to execution on a first platform. Fette et al teach that the waveform software can be ported to another hardware platform once the waveform software has been authorized to execution on a first platform (col. 3, lines 22-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide waveform software of Fette et al can be ported to another hardware platform to the system of Palermo in order to used for the remote location. See (col. 3, lines 1-21).

As to claim 4, Palermo fails to teach that in the event of a change in the hardware platform, the platform software is reauthorized. Fette et al teach that that in the event of a change in the hardware platform, the platform software is reauthorized (col.3, lines 31-57, and col. 4, lines 25-54). Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to provide the platform software is reauthorized of Fette et al to the system of Palermo. See (col. 8, lines 38-53).

As to claim 6, Palermo fails to teach that the waveform software includes a waveform description and the platform software includes a signal processing library, and wherein the waveform software is executed if the signal processing library contains the waveform description. Fette et al teach that the waveform software includes a waveform description and the platform software includes a signal processing library 303 (Fig. 3), and wherein the waveform software is executed if the signal processing library contains the waveform description (col. 8, lines 15-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a signal processing library of Fette et al to the system of Palermo in order to the available of signal processing library of waveform description. See (col. 7, lines 25-48).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Palermo in view of Fette et al as applied to claim 4 above, and further in view of Watanabe et al (Pub. No.: US 2002/0144134).

As to claim 5, Palermo fails to teach that the specified limit is at least one of a power level, a modulation characteristic and a frequency range. Watanabe et al teach that the specified limit is at least one of a power level, a modulation characteristic and a frequency range 60, 64 (Fig. 7), col. 3, [0040, 0044]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide one of a power level, a modulation characteristic and a frequency range of Watanabe et

al to the system of Palermo in order to flexibly scope with specification alteration (col. 5, [0055]).

Claim 10, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fette et al (US 6,052,600) in view of Watanabe et al (Pub. No.: US 2002/0144134).

As to claim 10, Fette et al teach that method of certifying a software-defined wireless communication device, comprising: validating a signal processing library residing in the software-defined wireless communications device 110, 114 (Fig. 1); connecting the signal processing library at run time (col. 4, lines 3-44) to an application program containing waveform descriptions. Fette et al fail to teach that enforcing limits on RF emission based on the waveform descriptions. Watanabe et al teach that enforcing limits on RF emission based on the waveform descriptions (col. 3, [0038-0039]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the RF emission based on the waveform description of Watanabe et al to the system of Fette et al in order to software available RF emission base on the specification compliance. See (col. 5, [0059]).

As to claim 13, Fette et al fail to teach that limits on RF emission is at least one of a power level, a modulation characteristic and a frequency range. Watanabe et al teach that limits on RF emission is at least one of a power level, a modulation characteristic and a frequency range (col. 3, [0040], [0044]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide one of a power level, a modulation characteristic and a frequency range of Watanabe et al to the

system of Fette et al in order to flexibly scope with RF emission specification criterion (col. 5, [0055], [0056]).

Allowable Subject Matter

Claim 7-9, 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 7, the prior art of record fail to teach that the waveform description is certified if the waveform description is not compatible with the signal processing library of the platform software.

As to claim 8, the prior art of record fail to teach that the platform software is executed on a processor or memory subsystem different from the waveform software.

As to claim 9, the prior art of record fail to teach that the hardware platform is selected from the group consisting of an analog wireless phone, a digital wireless phone, a cordless home phone, and a wireless data transmission device.

As to claim 11, the prior art of record fail to teach that the waveform descriptions further include authorization tags that define the limits on RF emission.

As to claim 12, the prior art of record fail to teach that the further including downloading additional waveforms descriptions that are compatible with the signal processing library.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H Doan whose telephone number is 703-305-6311. The examiner can normally be reached on 9:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung A Nay can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc Doan

A handwritten signature in black ink, appearing to read 'Phuoc Doan', with a long, sweeping horizontal line extending to the right.A handwritten signature in black ink, appearing to read 'Maung A Nay', positioned above the printed name.

NAY MAUNG
SUPERVISORY PATENT EXAMINER